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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/568,699
Filing Date: September 29, 2006
Appellant(s): DE MUNCK ET AL.

Leandro Arechederra III
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 8, 2010 appealing from the Office action mailed December 8, 2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 10-12, 19, 23, and 26-28 are pending in the application.

Claims 10-12, 19, 23, and 26-28 are currently rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

4,543,420	Godwin et al.	9-1985
5,880,310	Ageishi et al.	3-1999
5,798,319	Schlosberg et al.	8-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-12, 19, 23, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin et al. (US Pat. 4,543,420) in view of Schlosberg et al. (US Pat. 4,543,420).

Considering Claim 10, 23, and 28: Godwin et al. teaches a process for preparing a plasticizer ester (1:7-10) comprising esterifying a polybasic aromatic carboxylic acid or anhydride with isononyl or isodecyl alcohol (3:20-30); treating the ester with a base; stripping the liquid product; adding powdered/activated carbon/an adsorbent and clay/a filter aid to the liquid; and filtering the product (Example 1). : Godwin et al. teaches the adsorbent as being added at 95 °C (Example 1).

Godwin et al. does not teach filtering the crude ester to remove a liquid product and then stripping the liquid product before the purification steps. However, Schlosberg et al. does teach the filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping before the final filtration (purifying) steps (Col. 6, lines 1-5). Godwin et al. and Schlosberg et al. are analogous art because they are from the same field of endeavor, namely that of processes for making plasticizer esters. At the time of the invention, a person of ordinary skill in the art would have found it obvious to include the steps of filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping, as taught by Schlosberg et al., in the overall process, as taught by Godwin et al., and would have been motivated to do so because an extra filtration step can enhance the purity of the plasticizer ester as well as enhancing its properties.

Godwin et al. does not teach using phthalic anhydride. However, Schlosberg et al. teaches a plasticizer made from an esterification reaction between phthalic anhydride and an alcohol (Example 1). It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the phthalic anhydride of Schlosberg et al. in the process of Godwin et al., and the motivation to do so would have been, as Schlosberg et al. suggests, phthalate esters have high oxidative stability (Example 1).

The Office recognizes that all of the claimed effects and physical properties are not positively stated by the reference. However, the reference teaches all of the

claimed ingredients. Therefore, the claimed effects and physical properties would implicitly be achieved by combining the disclosed ingredients. If it is applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by combining only these ingredients.

Considering claims 11 and 12: Godwin et al. teaches the base as being caustic/sodium hydroxide (Example 1).

Considering Claim 19: Godwin et al. teaches the filter aid and adsorbent as being used in a combined amount of 0.3 wt percent (Example 1).

Considering Claims 26-27: Godwin et al. teaches the adsorbent as being added at 95 °C (Example 1).

Claims 10-12, 19, 23, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ageishi et al. (5,880,310) in view of Schlosberg et al. (5,798,319).

Regarding claim 10, Ageishi et al. teaches a process for producing plasticizer esters comprising (Col. 1, lines 6-7) esterifying an acid or an anhydride (Col. 3, lines 27-28) with an alcohol containing from 6 to 13 carbon atoms to form a crude ester (Col. 3, lines 41-44) and then treating it with a base solution (Col. 3, lines 54-55). The crude ester is purified through a combination of fine filtration using a filter aid and adsorption treatment (Col. 5, lines 8-11). The adsorbent is preferably activated carbon (Example 10). Ageishi et al. additionally teaches that the plasticizer ester is a di-alkyl phthalate (using the specified alcohols and phthalic anhydride will produce these) (Col. 3, lines 25-45) with ethyl hexyl alcohol being preferred (Example 1). Ageish et al. teaches a acid value below 0.2 mg KOH/g and a LVR of greater than 0.3 (Table 1).

Ageishi et al. does not teach filtering the crude ester to remove a liquid product and then stripping the liquid product before the purification steps. However, Schlosberg et al. does teach the filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping before the final filtration (purifying) steps (Col. 6, lines 1-5). Ageishi et al. and Schlosberg et al. are analogous art because they are from the

same field of endeavor, namely that of process for making plasticizer esters. At the time of the invention, a person of ordinary skill in the art would have found it obvious to include the steps of filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping, as taught by Schlosberg et al., in the overall process, as taught by Ageishi et al., and would have been motivated to do so because an extra filtration step can enhance the purity of the plasticizer ester as well as enhancing its properties.

The Office recognizes that all of the claimed effects and physical properties are not positively stated by the reference. However, the reference teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties would inherently be achieved by combining the disclosed ingredients. If it is applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by combining only these ingredients.

Regarding claims 11-12, Ageishi et al. additionally teaches that the base solution used in the process is an alkali metal salt, such as sodium hydroxide (Col. 6, lines 9-10).

Regarding claim 19, Ageishi et al. teaches that the adsorbent and the filter aid are used in an amount of 13 g per 1,000 grams of ester/1.3 weight percent (Example 10).

Regarding claim 23, Ageishi et al. does not teach that the filter aid is a clay or that the adsorbent also acts as the filter aid. However, Schlosberg et al. does teach that the adsorbent/filter aid can be clay (Col. 5, lines 55-60). At the time of the invention, a person of ordinary skill in the art would have found it obvious to use clay as filter aid/adsorbent, as taught by Schlosberg et al., in the overall process, as taught by Ageishi et al., and would have been motivated to do so because it is a common filter aid/adsorbent used in these processes and it is a naturally occurring material which makes it more economical than other choices.

Regarding claims 26-27, Ageishi et al. additionally teaches that the adsorption temperature and the filtration temperature are generally between 30° C and 120° C (Col. 5, lines 40-45).

Regarding claim 28, Ageishi et al. additionally teaches that the adsorption temperature and the filtration temperature are generally between 30° C and 120° C (Col. 5, lines 40-45) and that the plasticizer is a C_8 to C_{13} dialkyl phthalate (using the specified alcohols and phthalic anhydride will produce these) (Col. 3, lines 25-45).

(10) Response to Argument

A) The appellant's argument that Schlosberg et al. does not teach the avoidance of a stripping step prior to filtration step, as required by step (ii) is not persuasive. The presence of the word "then" following each process step indicates that the steps are sequential, and the claims have been interpreted as such. Schlosberg et al. teaches a flashing step prior to the filtration step (5:66-67), which the appellant has equated with a stripping step (page 11 of the Appeal Brief). However, the equivalence of a flash step and a stripping step is not supported by Schlosberg et al. or the original specification of the instant application. Schlosberg et al. teaches separate steps of flashing and stripping in their process (5:42-6:8), the first designed to remove water and the second designed to remove alcohol. The reference indicates that the processes are distinct steps with different purposes, and thus the steps would be considered to be distinct processes, rather than equivalents.

The interpretation of the flash process and the stripping process as being distinct is further supported by the original specification. The original specification teaches that "any excess alcohol and water may be removed e.g. by flashing or stripping with a vapour, e.g. with steam or nitrogen, or by a combination thereof". If the steps were equivalent as the applicant contends, they could not be used in combination as disclosed in the original specification. The original specification further indicates that a flash step is preferred in the inventive process and would not negatively impact the process (¶0037 and original claim 11 (since amended)).

B) The appellant's argument of unexpected results is not persuasive. "[A]ppellants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness." *Ex parte Ishizaka*, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992). See MPEP § 716.02(b). The appellant has alleged that the examples of the original specification establishes unexpected results, but has not explained how the data establishes unexpected results. Absent an explanation, the appellant has failed to meet their burden regarding the unexpected results.

C) In response to appellant's argument that the appellant desired improved electrical properties and reduced odor, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). The original specification states that these results are achieved by the selection of specific absorbents and conditions for the absorption step (¶0039-46). As Godwin et al. and Ageshi et al. teach the claimed absorption step, and thus would be expected to have the claimed properties. The appellant has not provided any evidence to establish that these properties would not be met by the cited references.

D) In response to appellant's argument that Schlosberg et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Schlosberg et al. is analogous art as it is directed towards a process of making a dialkyl phthalate compound using an absorbtion step to further purify the compound. Although, the compound has a different end use in Schlosberg et al., the reference is directed towards making the same compound as the instant application through a substantially similar process.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Liam Heincer/ /M. E./

Liam Heincer, Examiner 1796 Supervisory Patent Examiner, 1796

Conferees:

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